



University of Connecticut Health Center
School of Medicine

March 18th, 2014

RE: Raised bill 438, An Act Concerning Certification of Stroke Centers

To the members of the Public Health Committee,

Thank you for providing me with the opportunity to testify regarding an important public health issue for the residents of Connecticut. My name is Louise McCullough, and I am currently a Professor of Neurology at the University of Connecticut Health Center (UCHC) and a practicing vascular Neurologist at both UCHC and Hartford Hospital. I have been involved with the American Heart Association at both the local affiliate and national level for many years, having served as the Chair of the Clinical Brain study section and as a volunteer spokesperson. I was also closely involved with the formation of Connecticut's Department of Public Health's effort to develop a statewide stroke certification program in 2006. We initiated this program with our colleagues from the DPH when it became clear that significant disparities existed in the care provided to patients with acute stroke. Stroke is now the number one cause of adult disability and with our aging population the number of Connecticut residents at risk for stroke will continue to rise, leading to skyrocketing health care costs.

Currently there is one FDA approved therapy for acute ischemic stroke, the pharmacological thrombolytic tissue plasminogen activator (TPA). This agent has been repeatedly shown to reduce stroke-induced disability, with up to 40% of treated patients having minimal or no disability compared to patients that do not receive treatment. Time to treatment is critical, as nearly 2 million nerve cells die every minute unless blood flow is restored. Recent work from the Get with the Guidelines database show that the odds of ambulating and the ability to live independently diminish every 15 minutes TPA treatment is delayed. This treatment is one of the most efficacious therapies we have in clinical medicine, with a number needed to treat estimated at 6 (to put this in perspective the number needed to treat for benefit with commonly used medications such as statins is over 100). Despite its efficacy, only 8% of patients nationwide are treated. Much of this is due to the short time window for treatment, as TPA must be given within 4.5 hours of onset. Therefore, it is critical that systems be in place to provide emergent care and give our patients the best opportunity for treatment as rapidly and safely as possible.

The goal of this bill is to provide all Connecticut residents with the best opportunity to receive the highest level of care for stroke. This includes not only TPA administration, but also other life-saving interventions for patients affected by stroke, including neurosurgical intervention for subarachnoid and intracerebral hemorrhage (bleeding strokes). It has been conclusively shown in a multitude of studies that patient outcomes are better in certified stroke centers. These centers have the resources and expertise to treat these acutely ill patients, and give them the best

chance of functional recovery. It is important to stress that safe thrombolytic usage can be achieved at any hospital with the necessary neurological expertise and a CT scan, especially as hospitals now have the opportunity to provide expertise through telestroke networks, which have been shown to increase acute treatment rates safely. The services provided by certified centers however, extend beyond that of thrombolysis and include early access to rehabilitation and speech therapy (which provides swallow evaluations to prevent aspiration), early antiplatelet use, DVT prophylaxis and other core measures that have been shown to improve patient outcomes and reduce disability and stroke related complications. A certification program that is accepted statewide that accomplishes these goals is needed to ensure that all our Connecticut residents have equal access to this level of care that affords them with the best chance of recovery from this disabling disease. A commitment to following established protocols, meeting core measures, and tracking patient outcomes is critical to improving care.

In this proposed bill, we request and encourage state-wide legislation that will ensure early and appropriate access to a stroke system of care at stroke certified hospital. Our goals are to develop (1) a legal requirement for hospitals seeking recognition as a Stroke Center to achieve either an Acute Stroke Capable, Primary Stroke Center or Comprehensive Stroke Center certification based on nationally recognized standards including AHA/ASA Guidelines, Brain Attack Coalition Recommendations, the Joint Commission designation program and any other designation program deemed by DPH to have a suitably rigorous evaluation process; (2) Legislation enabling the Office of Emergency Medical Services to establish pre-hospital care protocols related to the assessment, treatment, and transport of stroke patients by licensed Emergency Medical Services providers in this state to certified stroke centers; (3) to create a statewide stroke registry that aligns with existing stroke consensus measures so that patient outcomes can be tracked to best utilize our state's resources and identify areas for improvement; (4) broaden medical reimbursement policy for acute stroke services to enable smaller community hospitals to better fund and support their programs and improve community educational efforts.

We thank you for your consideration

Sincerely,



Louise McCullough, MD/PhD
University of Connecticut Health Center &
The Stroke Center at Hartford Hospital
MC-1840, Department of Neurology
263 Farmington Avenue
Farmington, CT 06030
E-mail: lmccullough@uchc.edu